

## WHAT THE INVENTION CLAIMED IS

1. A data storage device using SDRAM, comprising:

a data transmission converting interface, connecting to a server for converting a data transmitted by said server into storable data;

5 a buffer, connecting to said data transmission converting interface for temporarily storing said data converted by said data transmission converting interface;

a direct memory storing/retrieving controller, connecting to said buffer;

at least one SDRAM, connecting to said direct memory storing/retrieving controller; and

10 a SDRAM controller, connecting to said direct memory storing/retrieving controller for controlling said SDRAM, for enabling said direct memory storing/retrieving controller to move said data temporarily stored in said buffer for storing into said SDRAM.

2. The data storage device according to claim 1, wherein said server is comprised  
15 of a computer.

3. The data storage device according to claim 1, wherein said data transmission converting interface is connected to said server using a wire for data transmission.

4. The data storage device according to claim 1, wherein said data transmission converting interface is wirelessly connected to said server for data transmission.

20 5. The data storage device according to claim 1, wherein said device is connected to a data retrieving element through said data transmission converting interface, wherein a current signal retrieved by said data retrieving element is converted by said data transmission converting interface into storable data that can be temporarily stored in said

buffer, and wherein when said SDRAM controller control the direct memory storing/retrieving controller again, said direct memory storing/retrieving controller will move said data temporarily stored in the buffer for storing into said SDRAM.

6. The data storage device according to claim 5, wherein said data retrieving  
5 element is comprised of a CCD.

7. The data storage device according to claim 5, wherein said data retrieving element is comprised of a CMOS image sensing element.

8. The data storage device according to claim 5, wherein said data transmission converting interface is connected to said data retrieving element using a wire for data  
10 transmission.

9. The data storage device according to claim 5, wherein said data transmission converting interface is connected wirelessly to said data retrieving element for data transmission.

10. The data storage device according to claim 1, wherein said SDRAM is  
15 comprised of a DDR SDRAM.

11. The data storage device according to claim 1, wherein said device further comprises a power management module and a dry cell, wherein when said power management module detects a low power supply to said data storage device, said power management module switches to said dry cell for supplying power to said SDRAM to  
20 enable said SDRAM to refresh.